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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/631,863  | 08/01/2003  | Shinpei Okajima      | SN-US035080         | 9166             |
| 22919   | 7590        | 05/31/2005           | EXAMINER            |                  |
| SHINJYU GLOBAL IP COUNSELORS, LLP<br>1233 20TH STREET, NW, SUITE 700<br>WASHINGTON, DC 20036-2680 |             |                      | BELLINGER, JASON R  |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 3617                |                  |

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/631,863

Applicant(s)

OKAJIMA, SHINPEI

Examiner

Jason R Bellinger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 8-11 and 23-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 12-22 and 26-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Claim Objections***

1. Claims 5, 17, 21, and 30 are objected to because of the following informalities:  
The phrase "one-piece, unitary member" in lines 3-4 of claim 5, line 22 of claim 17, line 3 of claim 21, and line 3 of claim 30 is redundant, since the terms "one-piece" and "unitary" mean the same thing. It is therefore suggested that one or the other terms be removed from the aforementioned phrase to more clearly describe the invention.

In line 16 of claim 17, the term "bores" should be replaced with the term --bore--, since only one internal bore is set forth.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-5, and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michelotti. Michelotti shows a bicycle rim having an outer annular portion 1 adapted to receive a tire thereon, the outer annular portion 1 including an outer opening. The rim also includes an inner annular portion 2 that is fixedly coupled to the outer annular portion 1 to form an annular hollow area therebetween, and further having an inner opening, which is aligned with the outer opening.

A first tubular attachment portion (namely the radially outer portion of bushing 11) is fixedly coupled to the outer annular portion 1 at the outer opening, and a second

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tubular attachment portion (namely the radially inner portion of bushing 11) is fixedly coupled to the inner annular portion 2 at the inner opening. The first and second tubular attachment portions (of bushing 11) define a spoke-receiving space with an internal surface configured and dimensioned to secure and end 12 of a spoke 10 within the space.

The first and second tubular spoke attachment portions (of bushing 11) have rim abutment surfaces that contact a radially facing surface of the rim to limit radial movement relative to the rim.

While Michelotti does not show the first and second tubular spoke attachment portions (of the bushing 11) being heat fused (i.e. by welding or brazing) to a respective one of the outer 1 and inner 2 annular portions of the rim, Michelotti does disclose that the tubular spoke attachment portions (of the bushing 11) are riveted to the corresponding portions of the rim. It is well known in the art that heat fusing techniques (such as welding and brazing) provide a more secure and permanent connection means between one or more elements than riveting techniques. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to heat fuse (i.e. weld or braze) the first and second tubular spoke attachment portions (of the bushing 11) to the outer 1 and inner 2 annular portions of the rim, as an equivalent fastening means, in order to form a permanent connection between the bushing and the rim, thus reinforcing the rim while eliminating friction or relative movement between the bushing and rim (which would reduce wear on both the bushing and the rim).

There is a plurality of bushings 11 (and thus a plurality of first and second tubular spoke attachment portions, etc.) connected to the rim. The first tubular attachment portion is integrally formed with the second tubular attachment portion as a "one-piece, unitary member" 11 having a longitudinally extending internal passageway that forms one of the spoke-receiving spaces. The first tubular attachment portion is at least partially located within the outer attachment opening, while the second tubular attachment portion is at least partially located within the inner attachment opening. The first tubular attachment portion extends radially inwardly from the outer annular portion 1 into the hollow area 3 of the rim, while the second tubular attachment portion extends radially outwardly from the inner annular portion 2 into the hollow area 3 of the rim.

4. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michelotti as applied to claims 1-5 and 12-16 above, and further in view of Mercat et al ('344 B). Michelotti shows the internal passageway(s) being a through bore(s). However, Michelotti does not show the internal passageway(s) being at least partially threaded.

In Figure 7, Mercat et al teaches the use of a bushing 18 that connects to both an outer and inner annular portion of a rim (see Figure 9) that includes an internal passageway that is a through bore, and is threaded 21. Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the internal passageway(s) of the bushing of Michelotti with threads in order to

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secure a spoke having an externally threaded spoke nipple, since threaded and non-threaded spoke nipples are equivalent means for fastening spokes to a rim.

Michelotti as modified by Mercat et al (specifically Michelotti) shows a plurality of spokes 10 having an outer end portion (attached to a spoke nipple 12), an inner end portion (not shown, but inherently there), and an elongated central portion that extends between the end portions. Both end portions are integrally formed with the elongated central portions (see Mercat et al, Figure 11).

5. Claims 17-22, and 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michelotti in view of Mercat et al as applied to claims 6-7 above, and further in view of Munson. Michelotti as modified by Mercat et al does not show the outer end of the spokes being directly threaded within the spoke-receiving spaces.

Munson teaches the use of a spoke E that is directly threaded into a spoke-receiving space of an element G engaging the rim F. Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to directly thread the spoke into the spoke-receiving space of Michelotti as modified by Mercat et al, in order to reduce the numbers of parts in the bicycle wheel assembly.

6. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Michelotti in view of Mercat et al and in further view of Munson as applied to claims 17-22, and 26-29 above, and further in view of Hinsberg et al. Michelotti as modified by Mercat et al and Munson do not show the inner end portions of the spokes including a

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threaded shaft section that is integrally formed with the elongated central portion as a one-piece, unitary member so that the threaded shaft section is threadably coupled to a spoke nipple mounted on the central hub of the wheel.

Hinsberg et al teaches the use of a one-piece, unitary spoke 7 having a threaded shaft section coupled to a central hub 8 through a spoke nipple 12. Therefore from this teaching, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the spoke of Michelotti as modified by Mercat et al and Munson with a threaded shaft section threadably coupled to a spoke nipple mounted on the central hub, for the purpose of providing a means for adjusting the tension of the spokes to provide a balanced wheel.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-7, 12-22, and 26-30 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references are considered to show rims having a spoke-attaching element that engages both the inner and out portions of the rim. For example, Mercat et al shows a rim of the type described above.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason R Bellinger whose telephone number is 703-308-6298. The examiner can normally be reached on Mon - Thurs (9:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Morano can be reached on 703-308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason R Bellinger  
Examiner  
Art Unit 3617

**JASON R. BELLINGER**  
**PATENT EXAMINER**

jrb

*JRB*  
*5/25/05*